PEOPLES GAS®
NATURAL GAS DELIVERY

Peoples Gas
200 East Randolph Street
Chicago, IL 60601
www.peoplesgasdelivery.com

August 18, 2020

Ms. Sarah Rolfes
Remedial Project Manager
United States Environmental Protection Agency
77 Jackson Blvd.
Chicago, IL 60604

RE: Submittal of Site-Specific Work Plan, Addendum No. 4 – Revision 1, Supplemental Remedial Investigation
Division Street Station, North Branch Site
Chicago, Illinois
The Peoples Gas Light and Coke Company
CERCLA Docket No. V-W-08-C-917, Site Spill ID – B5FZ
CERCLIS ID – ILD982074783

Dear Ms. Rolfes:

Attached is the Site-Specific Work Plan (SSWP), Addendum No. 4 - Revision 1 for supplemental remedial investigation at the Division Street Station Upland Operable Unit (OU) of the North Branch Site (Site). The attached SSWP was updated based on comments provided by USEPA on August 13, 2020. A summary of USEPA comments followed by PGL's response of how this comment has been addressed in the attached SSWP is provided below.

1. *The work plan indicates that the anticipated boring depth is 20 feet below ground surface or 4 feet into clay with no evidence of MGP residuals. As noted in the Completion Report, there have been remedial excavations near the northeast corner of the building extending to 30' below ground surface and the former tar settling tanks were located in this area. EPA suggests that borings SB-105, SB-104, and SB-107 be planned to go to 30 feet below ground surface or 4 feet into clay with no evidence of MGP residuals.*

PGL Response: Text on page 2 of the SSWP has been updated to state: The three soil borings in the northeast corner of Meter Shop – Warehouse Area (MS-SB104, MS-SB105 and MS-SB107) will be advanced to a depth of 30 feet below ground surface (bgs) or until 4 feet of native clay that does not exhibit the potential for MGP residuals is encountered, whichever depth is greater. The remaining six borings in the Meter Shop – Warehouse Area (MS-SB106, MS-SB108 through MS-SB112) will be advanced to a depth of 20 feet bgs or until 4 feet of native clay that does not exhibit the potential for MGP residuals is encountered, whichever depth is greater.

2. *EPA suggests that boring SB-104 be moved to the northeast corner of the building to understand what impacts may lie below the building closest to the known areas of deeper impacts at the former tar settling tanks.*

PGL Response: The location of MS-SB104 on Figure 1 has been updated, as requested. The exact location of MS-SB104 and all proposed borings will be dependent on access restrictions and utility locations that will be identified prior to commencing the investigation.

3. *Per our discussion, please review the groundwater contours and sampling data for the site. In preparation for the Remedial Investigation Report, groundwater samples could be collected during this sampling event to fill in any data gaps.*

PGL Response: As stated in the attached SSWP, the primary objective of this investigation is to characterize soil beneath the Meter Shop with the goal of determining the extent of affected soil that may warrant inclusion in removal action activities planned to be completed in 2021. Given that removal action activities are anticipated beneath the Meter Shop and surrounding soil,

characterization of groundwater quality prior to the planned soil removal action will not provide applicable data to support the Remedial Investigation Repot, post removal action. Groundwater elevations in this area may be estimated by recording location depth to saturated soil during this investigation, which will be documented on soil boring logs in accordance with standard operating procedure SAS-05-05.

If you have any questions regarding the content of this plan or wish to discuss this matter further, please do not hesitate to contact me at (312) 240-7634 or Patrick.Kenny@WECEnergyGroup.com.

Regards,

Patrick Kenny
Senior Environmental Consultant – Environmental

Enclosures: Site-Specific Work Plan, Addendum No. 4 - Revision 1

For distribution to: Mr. Gregg Miller, IEPA (via email and 2 hard copies via FedEx)
Mr. David Klatt, Jacobs (via email)
Mr. Marcus Byker, Ramboll (via email)

RAMBOLL

ENVIRONMENT
& HEALTH

MEMO

August 18, 2020

Ramboll
300 S. Wacker Drive
Suite 1300
Chicago, IL 60606
USA

T 773-796-4607
F 414-837-3608
www.ramboll.com

Ref. 72158

To: Patrick Kenny

From: Marcus. D. Byker, PE

cc: Tim B. Norris, PG

Re: Site-Specific Work Plan, Addendum No. 4 – Revision 1, Supplemental Remedial Investigation
Division Street Station Former MGP, North Branch Site
Chicago, Illinois
The Peoples Gas Light and Coke Company
CERCLA Docket No. V-W-08-C-917, Site Spill ID – B5FZ
CERCLIS ID – ILD982074783

INTRODUCTION

O'Brien & Gere Engineers, Inc., a Ramboll company (Ramboll) is pleased to submit for your review the following proposed supplemental investigation activities to take place at The Peoples Gas Light and Coke Company's (PGL) Division Street Station Former Manufactured Gas Plant (MGP), North Branch Site (herein referred to as the Site).

Information presented in this Technical Memorandum (Tech Memo) serves as an addendum to the procedures, tasks, and information provided in the United States Environmental Protection Agency (USEPA)-approved document entitled *Site-Specific Work Plan (SSWP), Revision 1*, dated September 21, 2009 and subsequent addenda (Addendum No. 1 [NRT, 2012], Addendum No. 2 [NRT, 2015], and Addendum No. 3 [NRT, 2017]). Revision 0 of this SSWP Addendum 4 was submitted to USEPA on July 15, 2020. This Revision 1 has been updated to address comments provided by USEPA on August 13, 2020.

Following previously completed Remedial Investigation (RI) activities, Ramboll identified data gaps remaining at the Site related to the potential soil impacts beneath the Meter Shop building located on the northeast portion of the property. Due to access restrictions, previous investigation beneath the Meter Shop was limited to soil gas sampling. PGL is in the process of consolidating Meter Shop operations to other facilities and as a result, it is now possible to implement a soil investigation below the building. The proposed investigation activities detailed herein are designed to supplement existing RI data, which are summarized in the Draft Remedial Investigation Data Summary (NRT, 2014) with supplemental investigation information provided in SSWP Addendum No. 2 (NRT, 2015), and SSWP Addendum No. 3 (NRT, 2017).

The following sections, tables, and figure describe the supplemental soil sampling investigation proposed at the Site. Unless otherwise stated below, sampling activities will be implemented in accordance with the SSWP.

OVERVIEW OF OBJECTIVES

The primary objective of the supplemental investigation is to investigate and characterize soil beneath the Meter Shop to assess if soils are impacted by site-specific constituents of potential concern (COPC). Results of the investigation will determine what further action, if any, is needed in this portion of the Site. If the results of this investigation indicate that Removal Action is warranted, this removal work may be included in Phase III removal action which is tentatively scheduled to take place in 2021. The scope for Phase I and II removal action was presented in the Removal Action Work Plan, Revision 1 (OBG, 2019). Phase I Removal

Action took place in 2019 and Phase II Removal action is currently ongoing. A scope of work related to Phase III removal action will be submitted to USEPA in Fall 2020 to summarize the results of this investigation and outline the proposed scope of the Phase III Removal Action activities.

PROPOSED SUPPLEMENTAL UPLAND INVESTIGATION

SCOPE OF INVESTIGATION

Twelve soil borings will be advanced in the area of the Meter Shop at the proposed locations shown on Figure 1. The Meter Shop – Warehouse Area is slab on grade construction with overhead clearance sufficient for drill rig access. The three soil borings in the northeast corner of Meter Shop – Warehouse Area (MS-SB104, MS-SB105 and MS-SB107) will be advanced to a depth of 30 feet below ground surface (bgs) or until 4 feet of native clay that does not exhibit the potential for MGP residuals is encountered, whichever depth is greater. The remaining six borings in the Meter Shop – Warehouse Area (MS-SB106, MS-SB108 through MS-SB112) will be advanced to a depth of 20 feet bgs or until 4 feet of native clay that does not exhibit the potential for MGP residuals is encountered, whichever depth is greater. Multiple lines of evidence will be used to determine if potential MGP residuals are encountered during the investigation. Indication of potential MGP residuals is defined as the presence of non-aqueous phase liquid (NAPL); soils that are oil-wetted, oil-coated, or stained; observation of sheen; observation of odor; and/or Photoionization Detector (PID) responses above ambient air background.

Three soil borings (MS-SB101 – MS-SB103) will be advanced in the Meter Shop - Office Area. The Meter Shop – Office Area has three levels. The main level consists of office space, the basement level consists of lockers, a turbine room and gas control facilities, and the sub-basement (limited to approximately one third of the sub-basement footprint) consists of storage (See Attachment A). The Meter Shop – Office Area has been excavated up to 23 feet below grade following MGP operations. Due to the extensive soil removal that occurred as part of building construction, the primary goal of investigating this area is to assess if excavation and backfill activities may have caused a preferential path for NAPL migration, leading to accumulation of NAPL beneath the floor slab.

The nature of the Meter Shop - Office Area building construction precludes access by traditional drill rigs. Accordingly, soil sampling will be completed using handheld equipment (*e.g*. a hammer drill to core through concrete, followed by hand augers or electric jack hammers to advance a spilt-spoon sampler). The anticipated depth of sampling will be limited to 5 feet beneath slab elevation.

All proposed locations may be modified in the field based on potential obstructions, unanticipated utility locations, and other field conditions. If an individual location must be modified, a sample will be collected as close as reasonably practicable to the original location. The proposed methods for sampling soil are described in SSWP, Revision 1 under Section 6.4. Field observations during sampling and logging will be documented in accordance with USEPA-approved *Multi-Site Quality Assurance Project Plan (QAPP) Addendum 3 Revision 1* (OBG, 2018), *Multi-Site Field Sampling Plan (FSP)* (IBS, 2008), and *Standard Operating Procedures (SOP) SAS-01-01* and *SAS-01-02* of the Multi-Site FSP. When feasible, field data will be collected electronically to maximize efficiency.

SOIL SAMPLING STRATEGY

Twelve soil borings (MS-SB101 through MS-SB112) will be advanced on the Site to investigate and characterize soils underlying the Meter Shop building footprint. All soil samples will be classified following USEPA-approved *SOP SAS-05-02* from the Multi-Site FSP (IBS, 2008). After completing the soil boring logs

and collecting soil samples, soil borings will be abandoned in accordance with the methods described in *SOP SAS-05-05* from the Multi-Site FSP (IBS, 2008). Soil sampling strategy details specific to each area are provided in subsequent sections. If field observations of potential MGP residuals are identified in a completed soil boring, additional borings may be advanced, at the discretion of the field geologist, to refine delineation.

Meter Shop – Warehouse Area

A minimum of three soil samples will be collected from each of the nine soil borings beneath the Meter Shop – Warehouse Area. Drilling will be completed using continuous sampling to define the presence/absence and vertical extent of affected soil at each boring location. Up to three subsurface soil samples will be collected at each boring based on the following protocol:

- If field observations indicate the potential for MGP residuals:
  - One subsurface soil sample will be collected from a 2-foot interval between 0-3 feet bgs with the most significant observations indicating the potential for MGP residuals.
  - One subsurface soil sample will be collected from a 2-foot interval between 3-10 feet bgs with the most significant observations indicating the potential for MGP residuals.
  - One subsurface soil sample will be collected from a 2-foot interval immediately beneath the interval with field observations of potential MGP residuals to document vertical extent.
- If no field observations of potential MGP residuals are identified:
  - One subsurface soil sample will be collected from the 2-foot interval between 0-3 feet bgs to represent subsurface conditions at the boring location.
  - One subsurface soil sample will be collected from a random 2-foot interval between 3-10 feet bgs to represent subsurface conditions at the boring location.
  - One subsurface soil sample may be collected from the top 2-foot interval of native clay at the bottom of the boring to document vertical extent.

Meter Shop – Office Area

A minimum of one soil sample will be collected from each of the three soil borings beneath the Meter Shop – Office Area. Drilling will be completed using continuous sampling to define the presence/absence and vertical extent of affected soil at each boring location.

- If field observations indicate the potential for MGP residuals:
  - One subsurface soil sample will be collected from a 2-foot interval with the most significant observations indicating the potential for MGP residuals.
  - One subsurface soil sample will be collected from a 2-foot interval immediately beneath the interval with field observations of potential MGP residuals to document vertical extent.
- If no field observations of potential MGP residuals are identified:
  - One subsurface soil sample will be collected from the 2-foot interval beneath the building slab to represent subsurface conditions at the boring location.

FIELD MOBILIZATION AND PERMITS

Field mobilization activities will be completed in accordance with USEPA-approved *SOP SAS-05-01* and Section 3 of the Multi-Site FSP (IBS, 2008). These activities include the following:

- Requesting utility location information from the Chicago Department of Transportation (CDOT) Office of Underground Coordination (OUC).
- Notifying and locating utilities through the local one-call joint utility 811 prior to commencement of work.

LABORATORY ANALYSIS OF COPCS

Soil samples will be submitted for analysis of the Site-specific COPCs summarized in Table 1. A summary of the soil sampling and analysis plan is provided in Table 2. The table includes the estimated quantity of samples within the base scope of the investigation, sample parameters, analytical methods, and the required number of samples for quality assurance. One or more laboratories from the USEPA-approved Multi-Site QAPP (OBG, 2018) will be selected for analysis of soil samples prior to field mobilization. Samples will be submitted under chain-of-custody procedure and will be analyzed on a standard turn-around time.

DATA VALIDATION AND EVALUATION

Data validation of laboratory data packages will be performed as described in Section 6.11 of the *SSWP Revision 1 (BMc, 2009)*. Laboratory procedures, field measurements, and sample results will be verified and/or validated as discussed in Section 4 of Multi-Site QAPP (OBG, 2018). Data collected during this supplemental soil sampling investigation will be compared to the screening levels (SLs) from the Risk Assessment Framework (RAF) Addendum 6 (Exponent, 2017) and combined with the previous data collected to develop a comprehensive soil data set depicting Site conditions.

INVESTIGATION-DERIVED WASTE DISPOSAL

Investigation-derived wastes will be managed in accordance with Section 6.8 of the *SSWP Revision 1 (BMc, 2009)*. All investigation derived waste will be containerized and transported to an approved, licensed landfill. Appropriate documentation will be maintained and provided in the RI/FS report.

SCHEDULE

Pending access to the Meter Shop, USEPA approval, weather conditions, and contractor availability, the investigation outlined in this Technical Memorandum is proposed to be initiated in third quarter of 2020.

Results will inform the next steps for addressing potential impact identified beneath the Meter Shop as part of Phase III Removal Action activities anticipated to be completed in 2021.

Please do not hesitate to contact me at 616-340-8982 or marcus.byker@ramboll.com if you have any questions regarding this document.

Regards,

Marcus D. Byker, PE
Managing Engineer

REFERENCES

Burns & McDonnell Engineering (BMc), 2009. Site-Specific Work Plan Revision 1, Division Street Operable Unit, September 21.

Exponent, 2014. Multi-Site Risk Assessment Framework Revision 3, Former Manufactured Gas Plant Sites, RAF Technical Memorandum, August 1.

Integrys Business Support, LLC. (IBS), 2008. Multi-Site Field Sampling Plan, Revision 4, September 8.

Natural Resource Technology, Inc. (NRT), 2012. Addendum No. 1 to Site-Specific Work Plan, Revision 1, Division Street Station Former MGP, North Branch Site, Chicago, Illinois, May 7.

NRT, 2014. Remedial Investigation Data Summary
Division Station Former MGP Operable Unit, North Branch Site, Chicago, Illinois, June 10.

NRT, 2015. Addendum No. 2 to Site-Specific Work Plan, Revision 1, Division Street Station Former MGP, North Branch Site, Chicago, Illinois, October 5.

NRT, 2017. Addendum No. 3 to Site-Specific Work Plan, Division Street Station Former MGP, North Branch Site, Chicago, Illinois, January 30.

O'Brien & Gere Engineers (OBG), 2018. Multi-Site Quality Assurance Project Plan (QAPP) Addendum 3 Revision 1, February 23.

OBG, 2019. Removal Action Work Plan, Revision 1, Division Street Station Former MGP, North Branch Site, Chicago, Illinois, March 8.

ENCLOSED

Table 1	Site-Specific Constituents of Potential Concern
Table 2	Sampling and Analysis Plan Summary
Figure 1	Meter Shop Soil Investigation
Attachment A	Cross-Section of Meter Shop – Office Area

TABLES

Table 1. Site-Specific Constituents of Potential Concern

Division Street Station Former MGP Site
Chicago, IL
EPA ID# ILD982074783

Analyte
Volatile Organic Compounds
Benzene
Ethylbenzene
Toluene
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
m&p-Xylene
o-Xylene
Xylene (Total)
1,1,1-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,4-Dichlorobenzene
Bromodichloromethane
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
Dibromochloromethane
Tetrachloroethene
trans-1,2-Dichloroethene
Trichloroethene
Vinyl chloride
Polycyclic Aromatic Hydrocarbons
Acenaphthene
Acenaphthylene
Anthracene
Benzo[a]anthracene
Benzo[a]pyrene
Benzo[b]fluoranthene
Benzo[g,h,i]perylene
Benzo[k]fluoranthene
Chrysene
Dibenz[a,h]anthracene
Fluoranthene
Fluorene
Indeno[1,2,3-cd]pyrene
2-Methylnaphthalene
Naphthalene
Phenanthrene
Pyrene
Metals and Inorganics
Arsenic
Lead
Manganese
Cyanide

Notes:

1. Site-specific COPC list is based on Site-Specific Work Plan Addendum 1, Revision 1 (NRT, 2012)
2. Bromodichloromethane, chloroform, dibromochloromethane, and vinyl chloride are included, at the request of USEPA, based on previous detections of these constituents in soil gas beneath the Maintenance Building.

Table 2. Sampling and Analysis Plan Summary

Division Street Station Former MGP Site
Chicago, IL
EPA ID# ILD982074783

Sample Type	Sample Frequency[9]	Proposed Number of Samples[1]	Parameter	Method	Field Duplicates[2] (1 extra volume)	MS/MSD[3] (2 extra volumes)	Equipment Blanks[4]	Trip Blanks[4]	TOTAL[5]	Estimated No. of Containers	Container Type	Minimum Volume	Preservation (Cool All Samples to 4° ± 2°C Unless 'None' Indicated)	Holding Time from Sample Date
Soil														
Soil 12 soil borings	1 subsurface (0-3" bgs) sample per Soil boring - Warehouse and Office Area	12	VOC[6]	5035/8260B	2	2	1 per soil sampling day with non-dedicated sampling equipment.	1 per cooler containing VOC samples.	36	40 sets	5 g Terra-core or similar (3/sample)	15 g	2 vials with $NaHSO_3$ and 1 vial with MeOH, and 2 oz jar for moisture content	14 days
	1 subsurface (3-10" bgs) sample per boring - Warehouse and Office Area	12	PAHs[7]	8270 SIM	2	2			40	40 sets	amber glass	8 oz	--	14/40 days
	1 native sample per boring -- Warehouse Area Only	9	Metals[8]	6020A	2	2			40	40 sets	plastic	8 oz	--	6 months/28 days for Hg
	Total:	33	Total Cyanide	9012A	2	2			40	40 sets	plastic	8 oz	--	14 days

Notes:
1. Proposed number of samples does not include contingency investigation locations.
2. Field duplicates will be collected at a frequency of 1 per 20 or fewer investigative soil samples.
3. Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples will be collected at a frequency of 1 per group of 20 or fewer investigative soil samples. Additional volume will be determined by laboratory requirements.
4. Trip blanks will accompany each cooler containing VOC samples, including equipment blanks.
5. Excludes equipment blanks and trip blanks.
6. VOCs include benzene, ethylbenzene, toluene, xylenes (total), 1,3,5-trimehtylbenzene, and 1,2,4-trimethylbenzene, 1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethane, 1,4-Dichlorobenzene, Bromodichloromethane, Carbon Tetrachloride, Chlorobenzene, Chloroethane, Chloroform , Chloromethane, cis-1,2-
7. PAHs include naphthalene, acenaphthylene, acenaphthene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, dibenzo(a,h)anthracene, benzo(g,h,i)perylene, 2-methylnaphthalene
8. Metals included arsenic, lead, and manganese.
9. Table is a general summary of sample frequency. Soil samples will be collected as described in the SSWP Technical Memorandum, Addendum No. 4.

Acronyms:
MeOH - methanol
$NaHSO_4$ - Sodium bisulfate
PAH - Polycyclic aromatic hydrocarbon
PVOC - Petroleum volatile organic compound

FIGURES

Y:\GIS\Projects\1919331MXD\2020\Figure 1_Meter Shop Soil Investigation_106.mxd

PROJECT: 1690000XXXX | DATED: 8/18/2020 | DESIGNER: galammc

PROPOSED SOIL BORING LOCATION

PREVIOUSLY INSTALLED SOIL BORING

ZONE BOUNDARY

NOTE:
LOCATION OF PROPOSED SOIL BORINGS MAY BE MODIFIED AS A RESULT OF UNEXPECTED FIELD CONDITIONS/BUILDING OBSTRUCTIONS.

0 25 50 Feet

METER SHOP SOIL INVESTIGATION
SITE SPECIFIC WORK PLAN

DIVISION STREET STATION OPERABLE UNIT 1
NORTH BRANCH SITE
CHICAGO, ILLINOIS

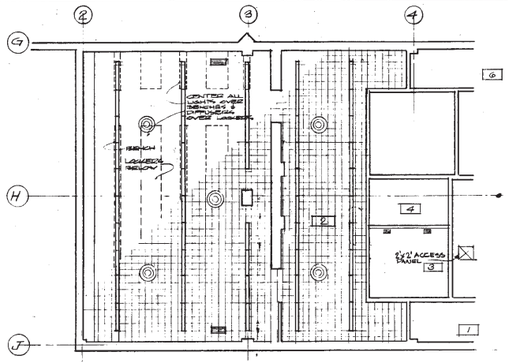
DRAFT

FIGURE 1

RAMBOLL US CORPORATION
A RAMBOLL COMPANY

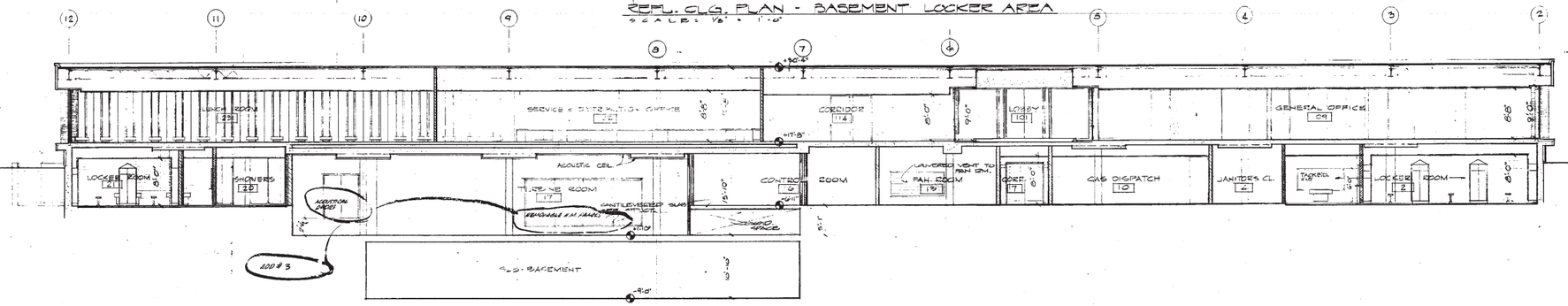
RAMBOLL

ATTACHMENT A
CROSS-SECTION OF METER SHOP – OFFICE AREA



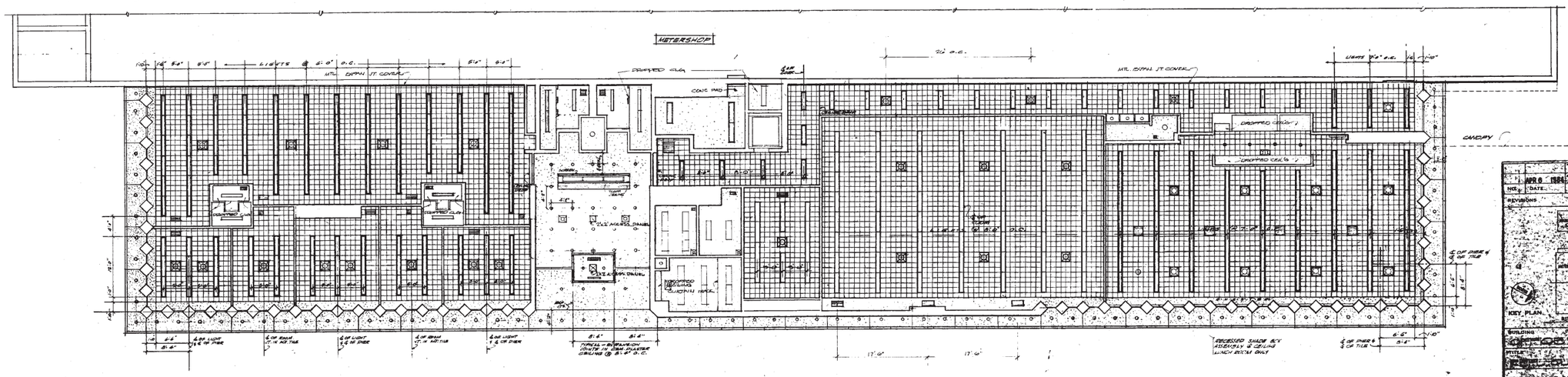
REFL. CLG. PLAN - BASEMENT LOCKER AREA

SCALE: 1/8" = 1'-0"



A12-1 LONGITUDINAL SECTION

SCALE: 1/8" = 1'-0"



A12-2 FIRST FLOOR OFFICE - REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

NOTE: VERIFY LOCATION & NUMBER FIXTURES WITH MECH. & ELECT. SHEETS

PROVIDE ALL NECESSARY ACCESS PANELS IN ALL CEILINGS AS REQ'D BY MECH., PLUMBING, & ELECTRICAL

NO.	DATE	REMARKS	BY
	APR 6 1984	ADDENDUM NO. 1	

REVISIONS

KEY PLAN

BUILDING

OFFICES

TITLE

REFL. CEILING PLAN

THE PEOPLES GAS LIGHT AND COKE CO.

DIVISION STREET SHOPS

CHICAGO, ILLINOIS

THE PERKINS & WILL PARTNERSHIP

ARCHITECTS

SHEET NO.

A12